## G. TYPHOON IDA (280600Z-311800Z JULY 1961)

TYPHOON IDA ORIGINATED TO THE E OF HELEN IN THE TROUGH THAT EXTENDED FROM THE ASIATIC MAINLAND. THE LOW FIRST APPEARED ON THE SURFACE CHART NEAR 21N 144E. ABOUT 850 MI E OF HELEN AT 260600Z. THE CIRCULATION SLOWLY DRIFTED TOWARD INO JIMA AND GAVE LITTLE INDICATION OF SIGNIFICANT INTENSITY. THE FEW WINDS AVAILABLE HAD A STRENGTH. VARYING FROM 5 TO 20 KTS. AT ABOUT 280500Z. FUCHU AIR FORCE WEATHER CENTRAL ADVISED JTWC OF A SHIP REPORT AND AIRCRAFT REPORT THAT INDI-CATED SURFACE WINDS IN EXCESS OF 40 KTS. THE FIRST WARNING WAS ISSUED ON IDA AS A TROPICAL STORM BASED ON THIS DATA. THE LIFE OF THE "TWINS" (HELEN-IDA) COMMENCED WITH THIS WARNING; IDA BECAME A TYPHOON AT 290000Z, ABOUT 125 MI SE OF IWO JIMA AND PASSED WITHIN 20 MI OF THAT ISLAND TO THE NE. THE LOWEST SLP WAS RECORDED BY IWO JIMA AS 985.5 MB AT 291030Z. SURFACE WINDS REACHED 35 KTS WITH GUSTS TO 57 KTS AT 1112Z. THESE WINDS OCCURRED AFTER THE CENTER PASSED AND WERE FROM THE WNW. THE SURFACE WINDS WERE OF LEAST INTENSITY AROUND THE TYPHOON IN THE LEFT SEMICIRCLE AND STRONGEST IN THE RIGHT FRONT QUADRANT, INDICATED BY SURFACE AND RECONNAISSANCE REPORTS, THEREFORE IWO JIMA HAD COMPARATIVELY LIGHT WINDS WITH THE TYPHOON PASSAGE.

IDA CONTINUED TO INTENSIFY UNTIL 300000Z AND THEN BEGAN TO DISSI-PATE, PROBABLY DO TO ITS PROXIMITY TO HELEN. THE TYPHOON MOVED ON A TRACK GENERALLY NW UNTIL AFTER 301800Z, THEN TURNED WESTWARD THEN WSW TO THE N OF HELEN. AT 311800Z, THE TIME OF THE LAST WARNING, IDA WAS IMBEDDED IN THE CIRCULATION OF HELEN AND APPEARED TO BE NO LONGER A SEPARATE CLOSED CIRCULATION. OF THE TWINS, IDA WAS THE WEAKER ONE WHOSE MOVEMENT APPEARED TO BE PARTIALLY CONTROLLED BY HELEN. AS IDA APPROACHED HELEN THE EFFECT UPON IDA BECAME MORE SIGNIFICANT. AT 290000Z, IDA AND HELEN WERE ABOUT 670 MI APART AND IDA WAS INTENSI-FYING. BY 300000Z THE TWO TYPHOONS WERE 455 MI FROM EACH OTHER AND IDA WAS WEAKENING EVEN THOUGH GENERAL ATMOSPHERIC CONDITIONS WERE SUITABLE FOR FURTHER INTENSIFICATION WITH THE EXCEPTION OF THE PRESENCE OF HELEN. BY 310000Z IDA WAS 230 MI FROM HELEN AND WAS IMBEDDED IN THE CIRCULATION OF HELEN. IT SHOULD BE NOTED THAT BOTH CIRCULATIONS ACHIEVED MAXIMUM INTENSITY WHILE ABOUT 570 MI APART AT ABOUT THE SAME TIME (HELEN, 90 KTS 290600Z-291200Z, IDA, 80 KTS 291200Z-300000Z), THEN COMMENCED DISSIPATING AS THE TWO APPROACHED EACH OTHER.

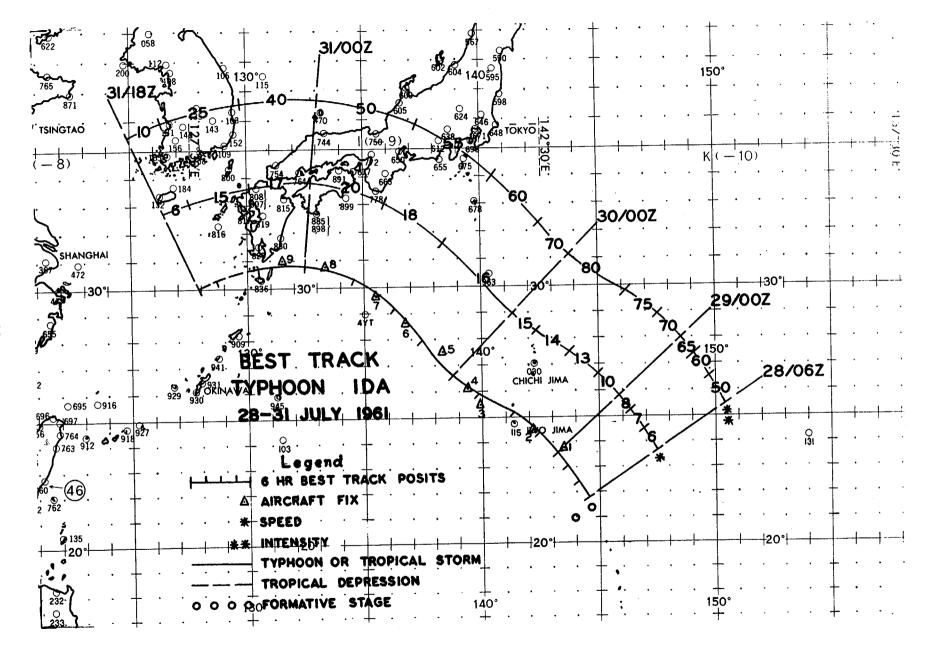
IDA WAS INFLUENCED BY THE HIGH PRESSURE CELL MOVING WESTWARD AS DESCRIBED IN THE HELEN NARRATIVE. THE FUJIWHARA EFFECT WAS CLASSICAL, RESULTING IN THE DISSIPATION AND PARTIAL CONTROL OF THE MOVEMENT OF IDA.

THE FORECAST PROBLEMS AND FORECAST ERRORS (250 MI FOR 11 FORE-CASTS OF 24 HOURS, 397 MI FOR 7 OUTLOOKS OF 48 HOURS) WERE GREATER ON THIS TYPHOON THAN ANY OTHER OF THE SEASON. THE FUJIWHARA EFFECT WAS IGNORED, EVEN THOUGH IT WAS SUGGESTED BY FAFWC, AND A CONTINUOUS ATTEMPT TO FORECAST THE TYPHOON TO THE RIGHT OF ITS TRACK WAS MADE,

WITH RECURVATURE OR WITH THE EXPECTATION THAT HELEN AND 1DA WOULD MOVE FURTHER APART, WITH THE LATTER STRIKING JAPAN.

10A TRAVELED 1090 MI AT AN AVERAGE SPEED OF 13 KTS IN THE THREE AND ONE HALF DAYS THAT WARNINGS WERE ISSUED. THE MINIMUM SPEED WAS 6 KTS BETWEEN 260600Z AND 281200Z. THE MAXIMUM SPEED WAS 20 KTS BETWEEN 301800Z AND 310000Z. THE MAXIMUM SURFACE WIND SPEED WAS 80 KTS BETWEEN 291200Z AND 300000Z.

IDA CREATED GREATER THAN NORMAL RAINFALL AS IT APPROACHED KYUSHU, AND NO EXTENSIVE DAMAGE REPORTS TO POPULATED AREAS WERE RECEIVED. THE POSSIBILITY OF SHIPPING DAMAGE EXISTS BUT IS UNKNOWN.



## LAND RADAR AND AIRCRAFT FIXES - TYPHOON IDA

FIX NO.		LAT.	LONG.	UNIT METHOD & ACCY	MAX SFC WND	MAX 700MB WND	MIN 700MB HGT	MIN SLP MBS	700MB T/Tp (°C)	EYE CHARACTERISTICS
1	282340Z	23.8N	143.4E	56- <b>P-</b> 03	90	45			18/12	40MI DIA WALL CLDS WELL DYLPD
2	290800Z	24.4N	142.2E	56-P-00	70	70	9560	990	17/12	CIRC 25MI DIA OPEN NE
3	291620Z	25.5N	140.0E	VW1-R-10						DIA 30MI
4	292135Z	26.1N	139.3E	56-P-05	80	70	9850	997	16/16	NOT DEFINED OPEN N
5	300251Z	27.5N	138.3E	56-P-07	95		9900	990	17/17	NOT DEFINED
6	300830Z	28.7N	136.8E	56-P-02	80	45	9950	992	17/09	NOT WELL DEFINED
7	301445Z	29.7N	135.5E	VW1-R-20						POORLY DEFINED
8	302130Z	30.8N	133.3E	56-P-01	50	35	9960	993	15/09	POORLY DEFINED
9	310300Z	31.ON	131.6E	56-P-02	45	37	9940	992	14/09	POORLY DEFINED

## TYPHOON IDA 28-31 JULY 1961 POSITION AND FORECAST VERIFICATION DATA

	STORM PO	OSITION	24 HR. ERROR	48 HR. ERROR
DTG	LAT.	LONG.	DEG. DISTANCE	DEG. DISTANCE
280600Z	21.9N	144.5E		******* .
281200Z	22.5N	144.2E		
281800Z	23.1N	143.8E		*****
290000Z	23.7N	143.2E	400 400 400 400 400 400	******
290600Z	24.3N	142.4E	<b>157-</b> 78	~
291200Z	25.3N	141.3E	143-120	
291800Z	25.9N	139.9E	112-135	
300000Z	26.8N	138.7E	093-180	
300600Z	28.ON	137.4E	101-232	128-297
301200Z	29.3N	136.3E	117-247	128-358
301800Z	30.4N	134.7E	130-103	110-317
310000Z	30.9N	132.4E	089-195	092-390
310600Z	30.7N	130.4E	060-420	093-470
311200Z	30.3N	128.7E	031-485	081-530
311800Z	30.0N	128.0E	031-560	059-415

AVERAGE 24 HOUR ERROR 250 MI AVERAGE 48 HOUR ERROR 397 MI